

entirely free of toxic symptoms. Nevertheless, its discovery has been a great step forward in the treatment of gonorrhea and its use should be cautiously continued.

Fever therapy, more difficult of administration than sulfanilamide, is undoubtedly very useful, but it has never become popular with the general practitioner because of the equipment required, and the supervision necessary in carrying out treatments. I believe that had sulfanilamid not been discovered when it was, fever therapy would be used more extensively today. Of the two methods, I believe the prescribing of sulfanilamide is less dangerous and accomplishes more.

The determination of cure is still difficult and should be carefully checked, as in the past, by all of our old methods, *i. e.*, prostatic massages, sounds, smears, and close observation over a period of several months, after a complete absence of all symptoms.

HERPES ZOSTER: TREATMENT WITH THIAMIN CHLORID

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DISCUSSION by J. F. Walsh, M.D., Eureka; Orris R. Myers, M.D., Eureka; Arne Ely Ingels, M.D., San Francisco.

THE pathology of herpes zoster is essentially an inflammation of the posterior root ganglia, causing a degeneration of some of the posterior root and of the peripheral nerve fibers. The skin lesions are erythematous patches, which soon change to vesicles and are found along the distribution of the affected nerve or nerves.

The initial symptom of this disease and one which, along with the dermatosis, presents the most prominent feature, is pain. This is, of course, due to the inflammatory process in the posterior root, but may also be attributed to the degenerative process occurring in the peripheral nerve tract. It may be likened to the pain in thrombo-angiitis obliterans, which is due to the nerve degeneration accompanying the circulatory disturbance (ischemic neuritis). In this latter condition it is a common belief that the pain persists until the process of nerve degeneration has been completed.

Herpes zoster may be divided into two etiologic types: (1) The symptomatic, which may be due to syphilis, spinal-cord tumor, vertebral disease, and arsenic poisoning, and (2) the essential type, which may come in epidemics, and is probably due to a virus. The treatment in the symptomatic type is obvious if, and when, the diagnosis is made. However, in the essential type, the chief treatment has consisted of alleviation of pain with salicylates, and the local care of the lesions. We have used pituitrin with questionable results.

Since the beneficial influence of vitamin B₁ or thiamin chlorid in neuritis, and its prevention of certain degenerative nerve changes is acknowledged; and since it has been established that the prominent feature in herpes zoster is a neuritis with degenerative changes, we had occasion to treat five such cases with subcutaneous administration of thiamin chlorid with gratifying results. These are herewith submitted:

REPORT OF CASES

CASE 1.—G. W., male, age 49. Occupation, woodsman. Appeared on October 27, 1938, complaining of severe pain

in right hip and right chest of about five days' duration. Two days prior, there appeared a rash on the right side of his chest. Past history included an injury to his lumbar region in April, 1937, when he fell a distance of twelve feet. There were no fractures at that time, but a period of five months was required before he was released from treatment. Since then he has enjoyed good health. Examination at this time was essentially negative, except for herpes zoster along the course of the twelfth dorsal nerve. Wassermann was negative. At this first visit the patient was treated by cleansing the lesions¹, and sodium salicylate was prescribed. He returned on October 31, 1938, complaining that the pain was only slightly relieved by salicylates. At this time he was given thiamin chlorid, 3000 units, hypodermically, and again on November 1, 1938. He returned on November 3, 1938, stating that for the first since the onset of his condition he had had a good night's sleep, and that at present he was entirely free from pain. He was again given a 3000-unit dose of thiamin chlorid, and this was repeated on November 5, 1938. At this last visit his lesions showed definite signs of healing and he was entirely free from pain.

CASE 2.—R. G., age 48, millwright. Admitted on November 17, 1938, complaining of a rash on left side of his chest, with severe pain in that area. The rash had appeared the day before. His condition was a herpes zoster along distribution of the eighth dorsal nerve on the left. Wassermann was negative. Examination otherwise was essentially negative. He was treated with thiamin chlorid, 3000 units hypodermically, on November 17, 18, 19, 21, 22, and 23. His pain had disappeared on the 19th, after two doses, and he was discharged from treatment with the lesions almost completely healed on November 23, 1938.

CASE 3.—G. S., male, age 22, mill worker. Came in on November 23, 1938, complaining of a rash in the right chest area, of three days' duration. Since the onset, there was a slight pain in his back with severe burning in the herpetic lesions. Examination was essentially negative, except for herpes zoster—distribution along the tenth and eleventh dorsal nerves on the right. Wassermann was negative. He was given vitamin B₁ 3000 units by hypodermic, on the following dates: November 23, 25, 26, 28, 30, and on December 2 and 5. The pain was improved slightly on November 26, and had entirely disappeared on November 28. The lesions showed some healing on November 30, and were completely healed on December 7, at which time the patient was discharged from treatment.

CASE 4.—I. W., female, age 15, student, appeared in the clinic on December 20, 1938, complaining of "shooting" pains in the left shoulder for the past six days. The pain was aggravated by motion. On December 17, 1938, she began to have itching on the shoulder and on the left arm. On December 19 she noticed a rash on the inner aspect of the arm, on the left breast, and over the left scapula. There was some pain in the left wrist. Examination revealed herpes zoster of the areas mentioned. She was given thiamin chlorid, 3000 units hypodermically, on the following dates: December 20, 21, 22, 23, 24, and 27. Progress was as follows: There was marked improvement from pain on December 22, and she was able to move her shoulder without discomfort. There were no additional lesions present. On December 23 she complained of having had a few spasms of mild pain in the shoulder early in the morning, but when seen at the office these had entirely cleared. On December 24 she felt practically normal again, and the lesions were drying. At the last visit, on December 27, the patient was apparently cured. The lesions were gone, except for small, dry, erythematous patches in their place.

CASE 5.—C. V. J., male, age 71, retired, appeared on December 17, 1938, complaining of pain in the right chest for the past two weeks. For two days prior to admission he had noticed an erythematous rash on the right chest, extending along the distribution of the fifth and sixth dorsal

¹ Note: The lesions in all five cases were painted daily with tincture of mercuric iodine in collodion.

nerves. There was pain in the back in the area of the fifth, sixth, and seventh dorsal vertebrae.

Past History.—The patient stated that he had had "shingles" on that same side twelve years ago. In October, 1938, he had consulted a physician for what appears to have been coronary attacks, but since then he had no trouble until the present illness. Examination revealed a senile individual, barrel-chested, with a vesicular rash on the right chest in the distribution of the fifth and sixth dorsal nerves. The rash was much milder in appearance than the other cases of herpes zoster in our series, but its distribution and the attending pain precluded any other diagnosis. Physical examination otherwise was essentially negative, except for a mild bronchitis. Wassermann was negative. He was given thiamin chlorid, 3000 units hypodermically, on December 17, 19, 20, 21, 22, 24, 27, 29, and 31. On December 19 there was marked improvement in pain, but the number and severity of the lesions were increased. On December 27 he stated that there was still some pain present in the anterior chest wall on the right, but the lesions were almost completely healed. The patient was last seen on January 4, 1939, at which time the lesions were entirely healed, except for two or three small scabs. The pain had not recurred since the last visit.

COMMENT

In comparing these cases of herpes zoster treated with thiamin chlorid with similar cases in our experience treated by local applications and salicylates, it appears that the former is a logical and more satisfactory means of combating this condition. The pain is relieved more promptly; the lesions clear up at an earlier date; and the total disability time is notably decreased. In one of our patients (Case 5), a longer period of treatment was required. The age of the patient may have been a factor. Five patients are hardly sufficient evidence from which to draw conclusions, but the results we have obtained indicate that further investigation in this field is warranted.

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DISCUSSION

J. F. WALSH, M. D. (Gross Building, Eureka).—Thiamin chlorid seems to be an effective means of therapy in herpes zoster. I have had three patients whom I treated in this manner, using 10 milligrams subcutaneously every day for six days. In each patient there was diminution of pain after the second dose; and after the fourth dose, the patients were entirely free from pain. The lesions healed in about ten days.

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ORRIS R. MYERS, M. D. (525 Seventh Street, Eureka).—I have read Doctor Goodman's report with interest, inasmuch as recently I had occasion to treat two cases with thiamin chlorid. I used 6,000 units intravenously, giving four doses on alternate days. The relief from pain was prompt, and the lesions healed within a week. Both patients had had pain for a week or more preceding treatment. I believe this method offers a great advance over our older means of treatment. For the local care of the lesions, I used 3 per cent ichthyol in collodion.

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ARNE ELY INGELS, M. D. (490 Post Street, San Francisco).—Doctor Goodman's favorable results with thiamin chlorid is welcomed by everyone who confronts the treatment problem of herpes zoster. Its value in the author's cases seems unquestionable beyond a mere coincidence.

When the usual approach is exhausted, excluding metastases to vertebrae, syphilis, peripheral neuritis and central nervous diseases, and the usual routine treatments (consisting of autohermotherapy, solution of K. I., vaccination, eventually morphin sulphate, pituitary extract injections, besides local applications and heat), all prove valueless, then it will be imperative to have a remedy at hand.

I wish the author would compile other cases, as time goes on, and report a larger number.

THE LURE OF MEDICAL HISTORY†

RARE MEDICAL BOOKS IN HUNTINGTON LIBRARY, AT SAN MARINO*

By L. BENDIKSON
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ABOUT half a year ago I had the pleasure of giving a talk before the Hollywood Academy of Medicine, about certain experiments in the field of documentary photography, as conducted in the laboratories of the Huntington Library at San Marino. But before starting with the main subject, I considered it would be appropriate to devote a few minutes to the rare medical books found in that famous institution, because their presence there is not generally known. And it is certainly not commonly known that there are in that library over one thousand medical books, originating from the first century of printing, which by themselves constitute a veritable reference library for the history of medicine. For no other purpose than to convince the audience of these facts, I then showed a few slides, representing some of the Huntington Library's rarest works on medicine. In consequence, the following account is in no way to be considered as a bibliographical attempt to cover a specific group of books, but merely as a random selection of rare medical works found at San Marino.

The first large group is that of the Incunabula, books which appeared during the first decades of printing. They represent the medical notions of the Middle Ages inherited from antiquity, as well as the more modern points of view, set forth in the new science of the Renaissance. The ideas prevalent in those books were those of Aristotle and Hippocrates, or rather their synthesis by Galenus. To show representative works of this group, in their very earliest editions, has not infrequently met with this difficulty, that the essays of some of the best-known writers appeared as a part of, or as a sequel to the works of other authors.

Hippocrates' *De medicorum astrologia*, for instance, as translated into Latin by Petrus de Abano, was published in Venice in 1485, as the concluding chapter of a work called *Opusculum repertorii pronosticon*. . . . The works of Aristotle, however, appeared at an early date, in collected form, and I could mention here the Greek version, as printed by Aldus Minutius, in Venice, in 1495.

Galenus' *Therapeutica*, also in Greek, was printed in the same city in 1500.

There are many books that are considerably older than these three, as Rodrigo Sanchez de Arevalo's *Speculum vite humane*, printed thirty-two years earlier, in 1468, and Avicenna's *Canonis medicinae libri* . . . of 1473.

Instances of collective publication of the works of several authors are the following: Arnoldus de Villa Nova's *Tractatus de arte cognoscendi venena*,

† A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

* Illustrations referred to in the text were presented at the time the lecture was given. Only one of the series appears in this printed article.